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August 20, 2018

Mr. Craig Dixon
Chairman
New Bedford Conservation Commission
New Bedford City Hall
133 William Street
New Bedford, MA 02744

RE: Nitsch Project #9972
209 Theodore Rice Blvd
Test Pit Results
New Bedford, MA

Dear Mr. Dixon:

Nitsch Engineering was requested by the Conservation Commission Agent to visit the 209 Theodore Rice Boulevard site to observe a test pit for the proposed infiltration system. The Contractor had installed the infiltration system and informed the Conservation Commission Agent that the test pit would be conducted adjacent to the installed system.

I arrived at the site at 10:00am on August 17, 2018 and conducted a soil evaluation of the excavation. The site contractor informed us that the top elevation of the excavation was at approximate elevation 96.5 and the bottom elevation of the excavation was at approximate elevation 89.5. The contractor used a laser level to obtain the elevations. I concluded that the excavation consisted of 71-inches of fill material over a 2-inch buried organic layer (A Horizon) followed by 17-inches of a naturally occurring loamy sand material. Redoximorphic features, and moist soils, were observed at a depth of 86-inches within the naturally occurring loamy sand material. These features indicate the presence of an estimated seasonal high groundwater table (ESHGW) at this depth. This information correlates to an approximate elevation of 89.3 for ESHGW. Please refer to the enclosed test pit log for additional information.

If you have any questions, please do not hesitate to call.

Very truly yours,

Nitsch Engineering, Inc.

Marc J. Gabriel, PE, CPESC
Project Manager

MJG/mma

P:\9972 New Bedford NOIPR\Planning\Project Data\2018-08-17 209 Theodore Rice Blvd Test Pit\2018-08-20 Test Pit 209 Theodore Rice Blvd.docx

Commonwealth of Massachusetts
City/Town of New Bedford

Form 11 - Soil Suitability Assessment for ~~On-Site Sewage Disposal~~ Drainage Purposes

C. On-Site Review (*minimum of two holes required at every proposed primary and reserve disposal area*)

Deep Observation Hole Number: TP-1 | 8/17/18 (Date) | 10 am (Time) | Sunny, 85°F (Weather)

1. Location

   Ground Elevation at Surface of Hole: 96.5 feet Latitude/Longitude: /

   Description of Location: Construction site → 209 Theodore Rice Blvd.

2. Land Use: Construction Site (e.g., woodland, agricultural field, vacant lot, etc.) | Driveway gravel base (Surface Stones (e.g., cobbles, stones, boulders, etc.)) | 0-3% (Slope (%))

   None (Vegetation) | Outwash Plain (Landform) | Top of slope (Position on Landscape (SU, SH, BS, FS, TS))

3. Distances from: Open Water Body ____ feet; Drainage Way ____ feet; Wetlands ____ feet; Property Line ____ feet; Drinking Water Well ____ feet; Other ____ feet

4. Parent Material: Proglacial Outwash Unsuitable Materials Present: ☒ Yes ☐ No

   If Yes: ☐ Disturbed Soil ☒ Fill Material ☐ Impervious Layer(s) ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: — (Depth Weeping from Pit); — (Depth Standing Water in Hole)

   Estimated Depth to High Groundwater: 86 inches | 89.3 elevation

   ↳ Mottles

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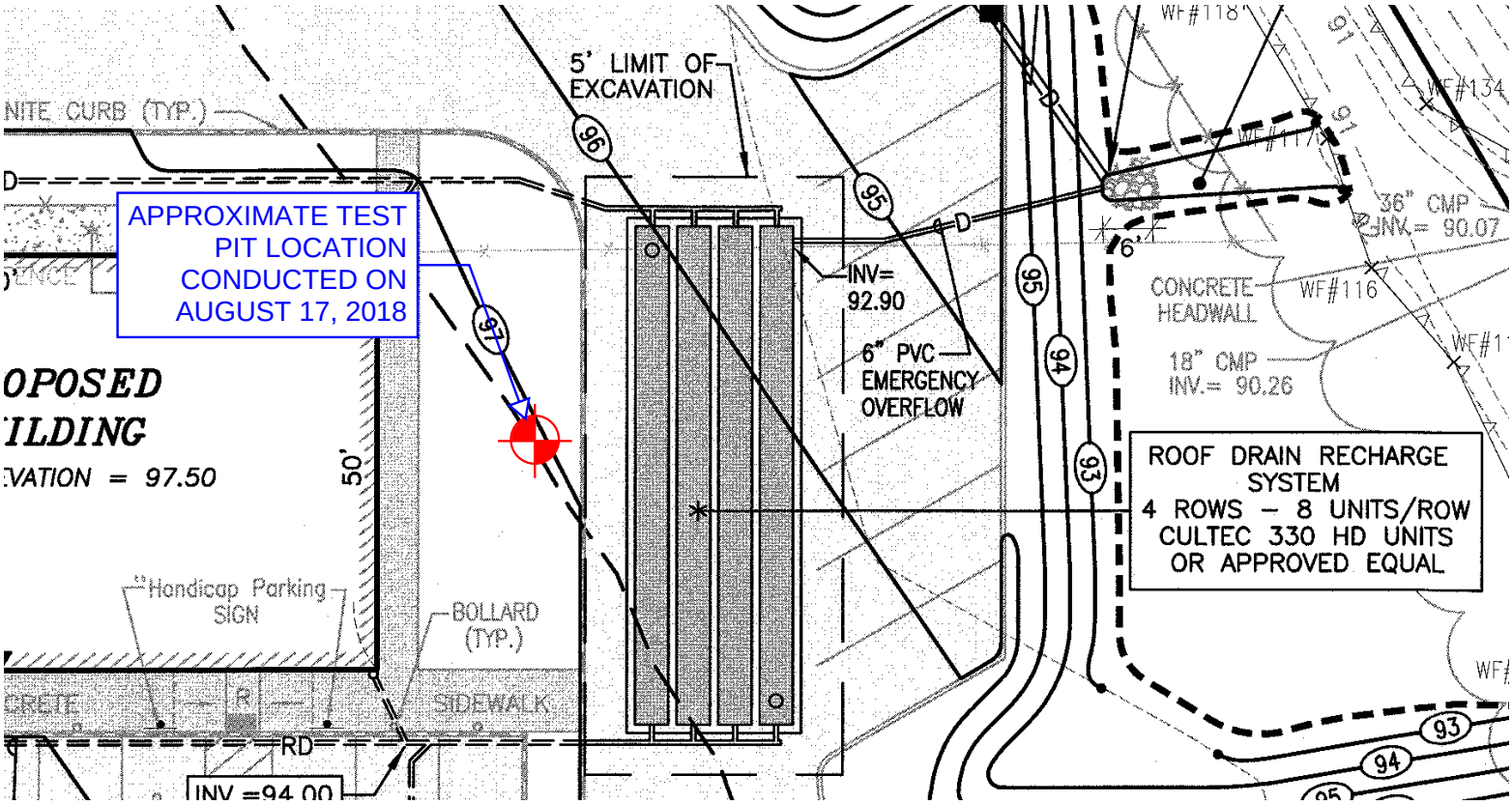
C. On-Site Review (continued)

Deep Observation Hole Number: TP-1

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-71	F	—	—	—	—	—	—	—	—	—	Mat'l. Varies
71-73	A-Buried	10yr 2/1	—	—	—	Sandy Loam	—	—	Weak Granular	Friable	—
73-90	C	2.5Y 5/2	66-inches	7.5yr 5/8	15	Loamy Sand	10	0	Massive	Loose	—

Additional Notes:

No weeping or standing water was observed. Moist soil was observed in the area of mottles near the bottom of excavation. Signs of a perched water table at 66-inches down likely because of buried ~~A~~ layer but not considered ESHGW. Top elevation of excavation was provided by the contractor.


APPROXIMATE TEST PIT LOCATION CONDUCTED ON AUGUST 17, 2018
5' LIMIT OF EXCAVATION
NITE CURB (TYP.)
OPOSED
ILDING
VATION = 97.50
50'
Handicap Parking SIGN
BOLLARD (TYP.)
SIDEWALK
RD
INV =94.00
INV= 92.90
6" PVC EMERGENCY OVERFLOW
ROOF DRAIN RECHARGE SYSTEM
4 ROWS - 8 UNITS/ROW
CULTEC 330 HD UNITS
OR APPROVED EQUAL
CONCRETE HEADWALL
WF#116
36" CMP
INV.= 90.07
18" CMP
INV.= 90.26
WF#118
WF#134
96
95
94
93
91
6'